

Work Order ID 84066

May-02-12 12:32:34 PM

Ship Today

\*84066\*

Page 1

Item ID: D412-698-028

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Bracket Assembly, RH (Aluminum Doors)

Start Date: 02/05/2012 Start Qty: 2.00

\*2\*

Cust Item ID:

Required Date: 04/05/2012 Req'd Qty: 2.00

\*2\*

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/05/02 Tooling:

Date:

Run Start \*NR1\*

QC:

Date: SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
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DSI 9484	C
----------	---

100

0.00

\*100\*

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D412-698-028/ DSI9484  
CHG003

S.12/05/02

MLJ 12/05/02

(2)

110

Pick Kit

0.00

\*110\*

Packaging

Memo

0.00

Packaging

12/5/2 sp

120

QC4- 100% Inspect kits for completeness

0.00

\*120\*

QC

Memo

0.00

Quality Control

S.12/05/02

(x2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 84066

**\*84066\***

Page 2

May-02-12 12:32:34 PM

Item ID: D412-698-028

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Bracket Assembly, RH (Aluminum Doors)

Stop

**\*NS2\***

Start Date: 02/05/2012 Start Qty: 2.00

**\*2\***

Cust Item ID:

Required Date: 04/05/2012 Req'd Qty: 2.00

**\*2\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

0.00

**\*130\***

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D412-698-028/ DSI 9484

Location:

PPP rev:

140

QC21- Final Inspection - Work Order Release

0.00

**\*140\***

QC

Memo

0.00

Quality Control

(2)

12/5/02

MLJ 12/05/02

MLJ 12/05/02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

May-02-12 12:32:38 PM

Work Order ID: 84066

\*84066\*

Parent Item: D412-698-028

\*D412-698-028\*

Parent Item Name: Bracket Assembly, RH (Aluminum Doors)

Start Date: 02/05/2012

Required Date: 04/05/2012

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP RevA: new issue DD 09.11.30 verified by:EC  
11.03.31 AS PER ECN11-531 verified by:EC

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3199-4


Manufactured

No

110

Each

50.0000

\*\* 

2

*Handwritten signature*

*8-2* \*D3199-4\*

Bracket, Fwd RH

Location

Loc Qty

Loc Code

ST236A

1

71786

1

ST236B

49

69572

2

75206

4

75207

43

*Handwritten '2'*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-698 REV. E OR LATER APPROVED REVISION  
AND ICA-D412-698 REV. 5 OR LATER APPROVED REVISION

REF. TCCA STC: SH92-43  
REF. FAA STC: SR01446NY  
REF. EASA.IM.R.S.00709

Field experience has shown that the forward D3199-1 brackets that are part of the D412-698-011/-012/-017 Cabin Door Roller Kits and forward D3675-1 brackets that are part of the D412-698-031/-032/-033 Cabin Door Roller Kits may wear prematurely if the aircraft is flown a significant amount of time with the sliding doors open. Dart has developed the D412-698-027/-028 kits that includes a longer D3199-3/-4 bracket for installation in the first forward position of the D412-698-011/-012/-017 kits to reduce wear on these forward brackets on aircraft equipped with aluminum doors. Likewise, Dart has developed the D412-698-037/-038 kits that includes a longer D3675-5/-6 bracket for installation in the first forward position of the D412-698-031/-032/-033 kits to reduce wear on these forward brackets on aircraft equipped with composite doors.

The D412-698-027/-028/-037/-038 kits may be installed as follows:

- 1) Remove the sliding door from the aircraft per Section 52.1 of ICA-D412-698
- 2) Remove the first forward D3199-1 or D3675-1 brackets as applicable.
- 3) Install the D3199-3/-4 or D3675-5/-6 bracket as applicable in lieu of the removed -1 bracket. Refer to Figure 1 Sheet 2 (aluminum doors) or Figure 2 Sheet 3 (composite doors).
- 4) Torque hardware per ICA-D412-698.
- 5) Re-install sliding door on aircraft per Section 52.2/52.3 of ICA-D412-698 as applicable.
- 6) Make entry in technical records of aircraft indicating that DSI 9484 has been completed.

## PARTS LIST

QTY. -027	QTY. -028	QTY. -037	QTY. -038	PART NUMBER	DESCRIPTION
X				D412-698-027	BRACKET KIT, LH (ALUMINUM DOORS)
	X			D412-698-028	BRACKET KIT, RH (ALUMINUM DOORS)
		X		D412-698-037	BRACKET KIT, LH (COMPOSITE DOORS)
			X	D412-698-038	BRACKET KIT, RH (COMPOSITE DOORS)
1				D3199-3	FORWARD BRACKET, LH
	1			D3199-4	FORWARD BRACKET, RH
		1		D3675-5	FORWARD BRACKET, LH
			1	D3675-6	FORWARD BRACKET, RH

## WEIGHT AND BALANCE

Installation	Weight	Lateral		Longitudinal		Applicability
		Arm	Moment	Arm	Moment	
D412-698-027 Bracket Kit	0.16 lb 0.07 kg	-48.0 in -1.22 m	-7.68 in-lb -0.09 m-kG	102.3 in 2.60 m	16.37 in-lb 0.18 m-kG	Aircraft Equipped with P/N 205-032-669-XXX Aluminum Doors
D412-698-028 Bracket Kit	0.16 lbs 0.07 kg	+48.0 +1.22 m	+7.68 in-lb +0.09 m-kG	102.3 in 2.60 m	16.37 in-lb 0.18 m-kG	
D412-698-037 Bracket Kit	0.18 lb 0.08 kg	-48.0 in -1.22 m	-8.64 in-lb -0.10 m-kG	102.3 in 2.60 m	18.41 in-lb 0.21 m-kG	Aircraft Equipped with P/N 412-030-300-XXX Composite Doors
D412-698-038 Bracket Kit	0.18 lb 0.08 kg	+48.0 in +1.22 m	+8.64 in-lb +0.10 m-kG	102.3 in 2.60 m	18.41 in-lb 0.21 m-kG	

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO #01-O-01

APPROVED

BY: D. Shepherd  
D. SHEPHERD (DE #02)

DATE: 11.03.21  
CERT. NO.: SH92-43  
ISSUE NO.: 5

C	UPDATED -027/-028/-037/-038 KITS AND INSTALLATION	MB	11.03.21
B	ADDED -037/-038 KIT FOR COMPOSITE DOORS; UPDATED TITLE ACCORDINGLY.	MB	10.12.17
A	NEW ISSUE	MB	09.10.16
REV.	DESCRIPTION	BY	DATE
DESIGN		<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.		REV. C SHEET 1 OF 3	
DATE	11.03.21	SCALE NTS	
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WORK ORDER  
NO. 84066 MJS  
12/05/02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

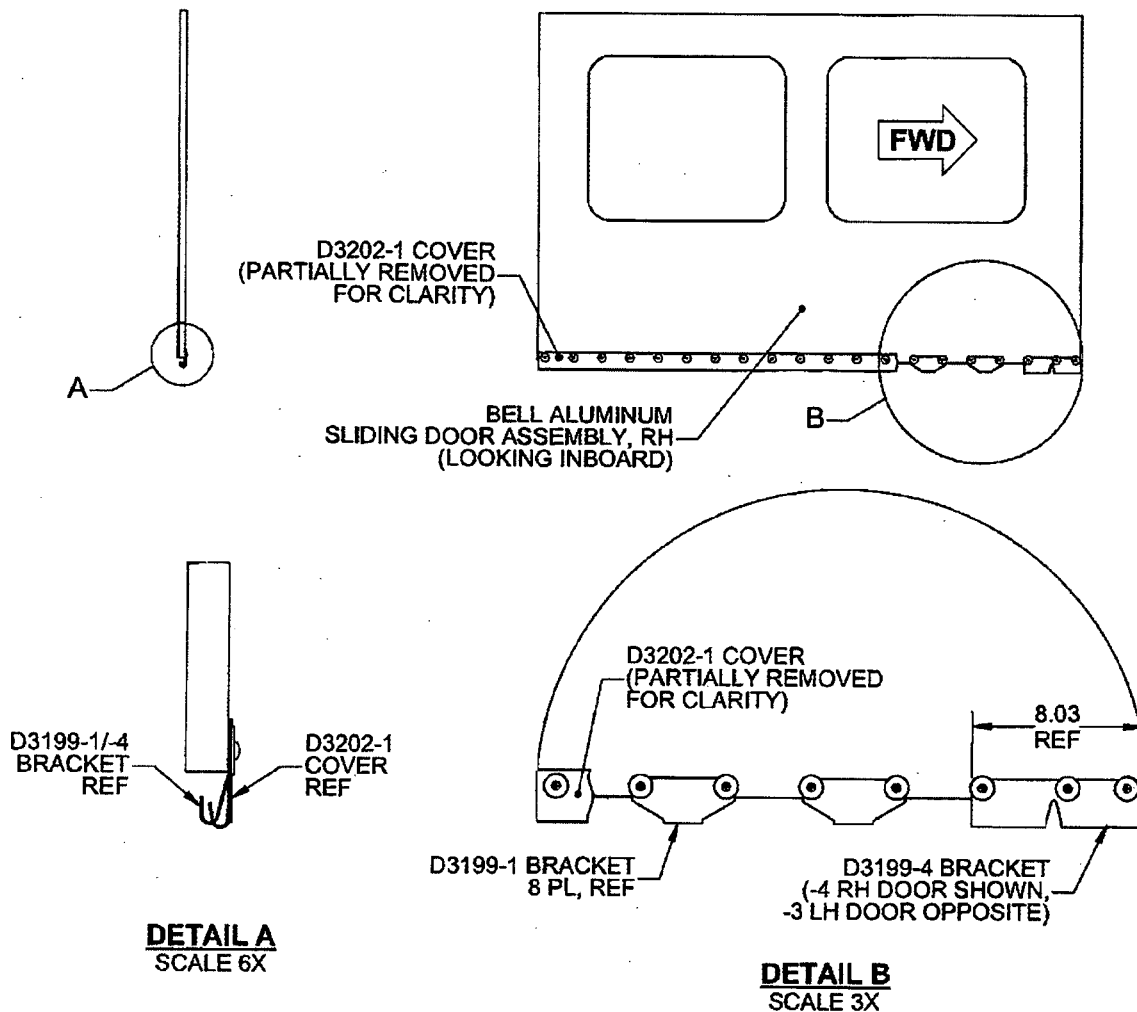
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries









**FIGURE 1: D3199-3/-4 BRACKET INSTALLATION ON ALUMINUM DOORS**  
(-4 SHOWN, -3 OPPOSITE)

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED  
BY: *[Signature]*  
D. SHEPHERD (DE # 02)

DATE: 11.03.21  
CERT. NO.: SH92-43  
ISSUE NO.: 5

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	ASS	DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9484	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		D412-698-027/-028/-037/-038 Kits	NTS
DATE	11.03.21	COPYRIGHT © 2009 BY DART AEROSPACE LTD	
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84066

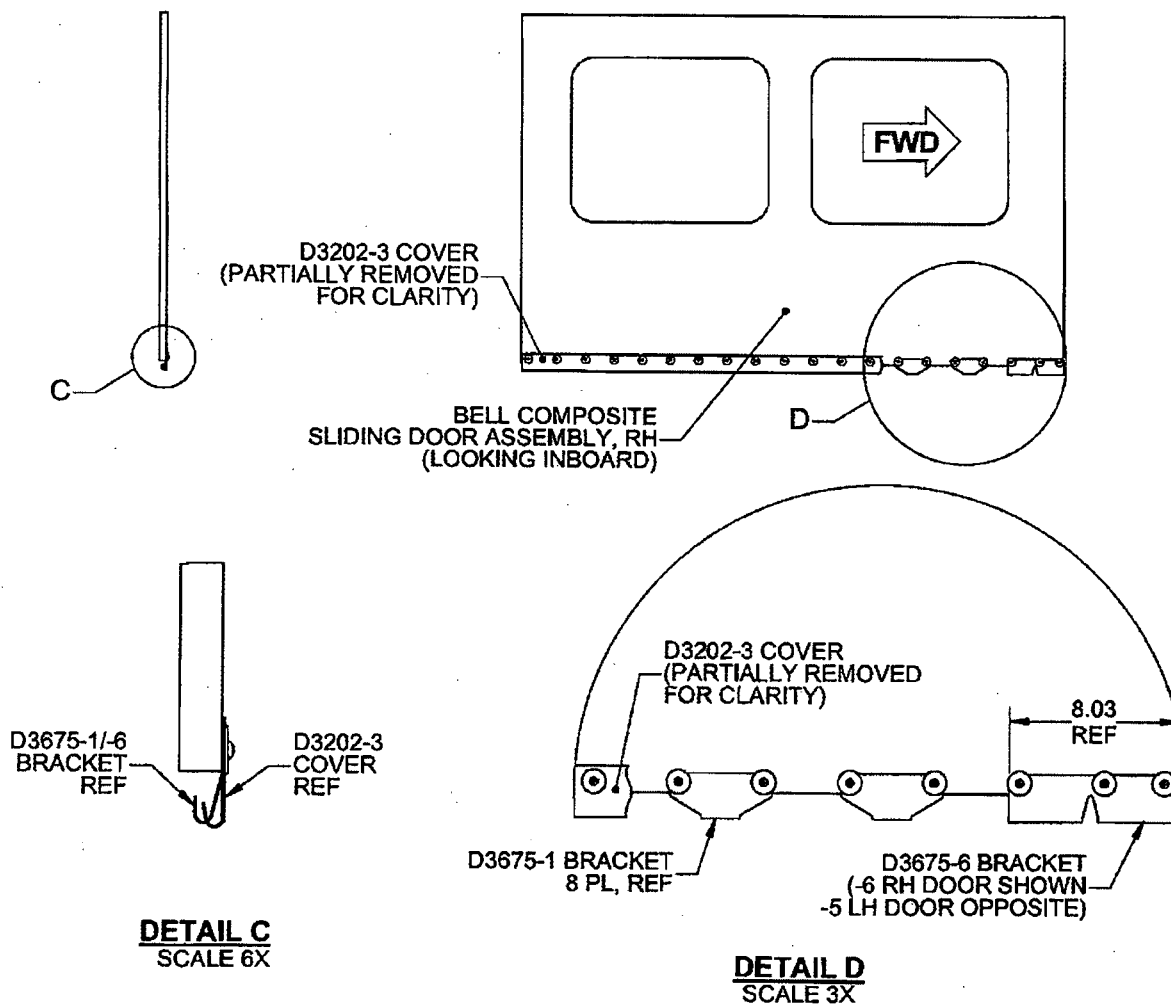
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries







**FIGURE 2: D3675-5/-6 BRACKET INSTALLATION ON COMPOSITE DOORS**  
(-6 SHOWN, -5 OPPOSITE)

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED  
BY: *[Signature]*  
D. SHEPHERD (DE # 02)

DATE: 11.03.21  
CERT. NO.: SH92-43  
ISSUE NO.: 5

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	ASS	DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9484	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		D412-698-027/-028/-037/-038 Kits	NTS
DATE	11.03.21	COPYRIGHT © 2009 BY DART AEROSPACE LTD	
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24066

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# REFERENCE ONLY

## DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-698 REV. E OR LATER APPROVED REVISION  
AND ICA-D412-698 REV. 5 OR LATER APPROVED REVISION

REF. TCCA STC: SH92-43  
REF. FAA STC: SR01446NY  
REF. EASA.IM.R.S.00709

Field experience has shown that the forward D3199-1 brackets that are part of the D412-698-011/-012/-017 Cabin Door Roller Kits and forward D3675-1 brackets that are part of the D412-698-031/-032/-033 Cabin Door Roller Kits may wear prematurely if the aircraft is flown a significant amount of time with the sliding doors open. Dart has developed the D412-698-027/-028 kits that includes a longer D3199-3/-4 bracket for installation in the first forward position of the D412-698-011/-012/-017 kits to reduce wear on these forward brackets on aircraft equipped with aluminum doors. Likewise, Dart has developed the D412-698-037/-038 kits that includes a longer D3675-5/-6 bracket for installation in the first forward position of the D412-698-031/-032/-033 kits to reduce wear on these forward brackets on aircraft equipped with composite doors.

The D412-698-027/-028/-037/-038 kits may be installed as follows:

- 1) Remove the sliding door from the aircraft per Section 52.1 of ICA-D412-698
- 2) Remove the first forward D3199-1 or D3675-1 brackets as applicable.
- 3) Install the D3199-3/-4 or D3675-5/-6 bracket as applicable in lieu of the removed -1 bracket. Refer to Figure 1 Sheet 2 (aluminum doors) or Figure 2 Sheet 3 (composite doors).
- 4) Torque hardware per ICA-D412-698.
- 5) Re-install sliding door on aircraft per Section 52.2/52.3 of ICA-D412-698 as applicable.
- 6) Make entry in technical records of aircraft indicating that DSI 9484 has been completed.

### PARTS LIST

QTY -027	QTY -028	QTY -037	QTY -038	PART NUMBER	DESCRIPTION
X				D412-698-027	BRACKET KIT, LH (ALUMINUM DOORS)
	X			D412-698-028	BRACKET KIT, RH (ALUMINUM DOORS)
		X		D412-698-037	BRACKET KIT, LH (COMPOSITE DOORS)
			X	D412-698-038	BRACKET KIT, RH (COMPOSITE DOORS)
1				D3199-3	FORWARD BRACKET, LH
	1			D3199-4	FORWARD BRACKET, RH
		1		D3675-5	FORWARD BRACKET, LH
			1	D3675-6	FORWARD BRACKET, RH

### WEIGHT AND BALANCE

Installation	Weight	Lateral		Longitudinal		Applicability
		Arm	Moment	Arm	Moment	
D412-698-027 Bracket Kit	0.16 lb 0.07 kg	-48.0 in -1.22 m	-7.68 in-lb -0.09 m-k	102.3 in 2.60 m	16.37 in-lb 0.18 m-k	Aircraft Equipped with P/N 205-032-669-XXX Aluminum Doors
D412-698-028 Bracket Kit	0.16 lbs 0.07 kg	+48.0 +1.22 m	+7.68 in-lb +0.09 m-k	102.3 in 2.60 m	16.37 in-lb 0.18 m-k	
D412-698-037 Bracket Kit	0.18 lb 0.08 kg	-48.0 in -1.22 m	-8.64 in-lb -0.10 m-k	102.3 in 2.60 m	18.41 in-lb 0.21 m-k	Aircraft Equipped with P/N 412-030-300-XXX Composite Doors
D412-698-038 Bracket Kit	0.18 lb 0.08 kg	+48.0 in +1.22 m	+8.64 in-lb +0.10 m-k	102.3 in 2.60 m	18.41 in-lb 0.21 m-k	

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED  
BY: *[Signature]*  
D. SHEPHERD (DE # 02)

DATE: 11.03.21  
CERT. NO.: SH92-43  
ISSUE NO.: 5

C	UPDATED -027/-028/-037/-038 KITS AND INSTALLATION	MB	11.03.21
B	ADDED -037/-038 KIT FOR COMPOSITE DOORS; UPDATED TITLE ACCORDINGLY.	MB	10.12.17
A	NEW ISSUE	<i>[Signature]</i>	09.10.16
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	ASS	DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9484	SHEET 1 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	D412-698-027/-028/-037/-038 Kits	NTS
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